1.0 INTRODUCTION

The U.S. Department of the Interior, Bureau of Land Management (BLM), is preparing an Environmental Impact Statement (EIS) to evaluate and disclose to the public direct, indirect, and cumulative environmental impacts from continued exploration for and development of natural gas resources in the Pinedale Anticline Project Area (PAPA) in Sublette County, Wyoming. This technical report quantifies the anticipated air emissions from full development of the Pinedale Anticline Project (PAP). Quantification of the actual change in emissions of natural gas production and permitted facilities between 1995 and 1998, and the anticipated changes in emissions from reasonably foreseeable development (RFD) is also provided in this report. These emissions are developed primarily for use in dispersion models that evaluate the impact from PAP and general development in the Southwest Wyoming air basin. Results of the dispersion modeling are provided in another technical report. These emission summaries in this report also provide the public with a sense of the relative magnitude of the increases anticipated from the Pinedale Anticline Project in relation to other concurrent emission increases and decreases in the air basin.

The PAP is the proposed development of a natural gas resource with a maximum capacity of approximately 700 wells in central Sublette County. Maximum required compression is expected to be 26,000 hp which could support production of approximately 350 MMCFD for the entire well field.

The associated Air Quality Assessment Protocol (Protocol) describes the purpose of the air quality portion of the EIS and methods for estimating emissions. Explanations within that document combined with this report provide full information on the methods used and assumptions made to estimate the emissions.

Section 2 provides the emission estimates for the PAP sources, which include construction activities, production activities, wind erosion, and compression. This inventory represents the "potential to emit," which assumes continuous operation of wells and compressors (i.e., 8,760 hours per year). Some uncertainty is inherent in this type of analysis, which predicts impacts from future events. Simplifying assumptions, described in the Protocol and text of this document were necessary for completion of this analysis. Section 3 provides the emission changes between 1995 and 1998 from changes in gas production throughout the air basin, and from RFD of gas resources other than the PAP. Section 4 contains an inventory of all Wyoming permit actions resulting in increases and decreases in emissions between 1995 and 1998. Emission calculations and listings are provided in the appendices.

